

docket number with appropriate paragraph from the corresponding International Publication WO 00/41566. (See, page 11, line 26 to page 12, line 9 of WO 00/41566 and page 20, lines 15-16 of the specification). No new matter has been added as a result of this preliminary amendment and entry thereof is respectfully requested.

III. CONCLUSION

Applicants believe the claims are in condition for allowance and request early notification to that effect.

Respectfully submitted,

Date: 09 Sept 02

By: 

Dahna S. Pasternak
Registration No. 41,411
Attorney for Applicants

ROBINS & PASTERNAK LLP
545 Middlefield Road, Suite 180
Menlo Park, CA 94025
Tel.: 650-325-7812
Fax: 650-325-7823



Atty Docket No. 8325-0011
S11-US1
09/535,088

Marked-Up Version of Specification:

The paragraph beginning on page 18, line 6 has been amended as follows:

--ZPFs that bind to a particular target gene, and the nucleic acids encoding them, can be used for a variety of applications. These applications include therapeutic methods in which a ZFP or a nucleic acid encoding it is administered to a subject and used to modulate the expression of a target gene within the subject [(see copending application Townsend & Townsend & Crew Attorney Docket 019496-002200, filed January 12, 1999)]. Examples of endogenous genes suitable for regulation include VEGF, CCR5, ERa, Her2/Neu, Tat, Rev, HBV C, S, X, and P, LDL-R, PEPCK, CYP7, Fibrinogen, ApoB, Apo E, Apo(a), renin, NF-κB, I-κB, TNF-α, FAS ligand, amyloid precursor protein, atrial natriuretic factor, ob-leptin, ucp-1, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-12, G-CSF, GM-CSF, Epo, PDGF, PAF, p53, Rb, fetal hemoglobin, dystrophin, eutrophin, GDNF, NGF, IGF-1, VEGF receptors flt and flk, topoisomerase, telomerase, bcl-2, cyclins, angiostatin, IGF, ICAM-1, STATS, c-myc, c-myb, TH, PTI-1, polygalacturonase, EPSP synthase, FAD2-1, delta-12desaturase, delta-9 desaturase, delta-15 desaturase, acetyl-CoA carboxylase, acyl-ACP-thioesterase, ADP-glucose pyrophosphorylase, starch synthase, cellulose synthase, sucrose synthase, senescence-associated genes, heavy metal chelators, fatty acid hydroperoxide lyase, viral genes, protozoal genes, fungal genes, and bacterial genes. In general, suitable genes to be regulated include cytokines, lymphokines, growth factors, mitogenic factors, chemotactic factors, onco-active factors, receptors, potassium channels, G-proteins, signal transduction molecules, and other disease-related genes. See, co-owned WO 00/41566. The modulation can be in the form of repression, for example, when the target gene resides in a pathological infecting microorganisms, or in an endogenous gene of the patient, such as an oncogene or viral receptor, that is contributing to a disease state. Alternatively, the modulation can be in the form of activation when activation of expression or increased expression of an endogenous cellular gene can ameliorate a diseased state. For such applications, ZFPs, or more typically, nucleic acids encoding them are formulated with a pharmaceutically acceptable carrier as a pharmaceutical composition.--

Currently Pending Claims

24. A polynucleotide which encodes a polypeptide comprising first, second and third zinc fingers wherein the amino acid sequence of the first zinc finger comprises the sequence TTSNLRR (SEQ ID NO 814), the amino acid sequence of the second zinc finger comprises the sequence RSSNLQR (SEQ ID NO 1019), and the amino acid sequence of the third zinc finger comprises the sequence RSDHLSR (SEQ ID NO 1224).

25. The polynucleotide of claim 24, wherein the polypeptide binds to a target site comprising the nucleotide sequence GGGGAGGATC (SEQ ID NO 609) and further wherein

26. The polynucleotide of claim 24, wherein the polypeptide further comprises a heterologous domain.

27. The polynucleotide of claim 27, wherein the heterologous domain is a transcription factor domain.

28. The polynucleotide of claim 27, wherein the transcription factor domain is an activation domain.

29. The polynucleotide of claim 28, wherein the activation domain comprises the HSV VP16 activation domain.

30. The polynucleotide of claim 28, wherein the activation domain comprises the p65 subunit of nuclear factor kappa B.

31. The polynucleotide of claim 27, wherein the transcription factor domain is a repression domain.

32. The polynucleotide of claim 31, wherein the repression domain comprises a KRAB repression domain.

33. The polynucleotide of claim 24, wherein the polypeptide further comprises a regulatory domain.

34. The polynucleotide of claim 33, wherein the polypeptide comprises multiple regulatory domains.

35. The polynucleotide of claim 26, wherein the heterologous domain binds non-covalently to a polypeptide comprising a regulatory domain.

36. The polynucleotide of claim 24 operably linked to a promoter.

37. The polynucleotide of claim 24, wherein the polypeptide modulates expression of a target gene.

38. The polynucleotide of claim 37, wherein the target gene is VEGF.